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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,490	01/18/2002	Stefan Keller-Tuberg	ALCATEL 135865	1446
24587	7590	10/05/2005	EXAMINER	
ALCATEL USA INTELLECTUAL PROPERTY DEPARTMENT 3400 W. PLANO PARKWAY, MS LEGL2 PLANO, TX 75075			SHAND, ROBERTA A	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/051,490

Applicant(s)

KELLER-TUBERG, STEFAN

Examiner

Roberta A. Shand

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-37, 62 and 83 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 13, 17-22, 38-42, 45, 50, 54-59, 63-67, 70 and 75-80 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9-12, 14-16, 23, 24, 43, 44, 46-49, 51-53, 60, 61, 68, 69, 71-74, 81 and 82 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/21/03, 5/13/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Claim Objections***

1. Claim 64 is objected to because of the following informalities: claim 64 is dependent on claim 64. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 8, 17-22, 38-42, 45, 54-59, 63-67, 70 and 75-80 are rejected under 35 U.S.C. 102(e) as being anticipated by Cai (U.S. 6134246).

4. Regarding claim 1, Cai teaches (abstract) a method for facilitating inverse multiplexing over ATM, comprising: receiving a stream of sequentially aligned ATM cells via an originating end point logical communication link; associating a sequence identifier with each one of the cells (col. 2, lines 20-54; holding a first portion and a second portion of the cell in a first and second transmitter queue (fig. 11) associated with a first and second IM link (fig. 5); and sequentially forwarding the cells from each queue over the IM link wherein the first IM link has a data transmission rate disparate in at least one direction with respect to the transmission rate of the second IM (col. 6, line 52 – col. 7, line 5 and fig. 6).

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5. Regarding claims 2, 39 and 64, Cai teaches (fig. 11) receiving a stream of sequentially aligned ATM cells at a transmitter queue selector (pointer); capable of enabling the first portion and the second portion to be added to the first and second transmitter queue.
6. Regarding claims 3, 4, 40, 41, 65 and 66, Cai teaches determining a sequence code for each of the cells and inserting the code into an information payload portion of the cell (col. 4, line 64 - col. 5, line 20).
7. Regarding claims 5, 42 and 67, it is inherent in Cai system and method that the sequence identifier would be placed in an empty portion of the packet header (fig. 7).
8. Regarding claims 8, 45 and 70, Cai teaches (col. 20, lines 44-62) determining the sequence identifier for each cell arriving at the queue selector.
9. Regarding claims 17, 54 and 75, Cai teaches (col. 2, lines 20-47 and fig. 5) receiving at least a portion of the cell; forwarding an aligned stream of inversely multiplexed ATM cells from the receiver across a destination endpoint logical communication link
10. Regarding claims 18, 55 and 76, Cai teaches (fig. 5) holding at least a portion of the cells in a receiver queue.

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11. Regarding claims 19, 56 and 77, Cai teaches (col. 19, lines 65 – col. 20, line 62) determining a receiver queue position associated with each cell.

12. Regarding claims 20, 57 and 78, Cai teaches (col. 19, lines 65 – col. 20, line 62) sequentially retrieving the cells.

13. Regarding claims 21, 58 and 79, Cai teaches (col. 19, lines 65 – col. 20, line 62) identifying next cell to be forwarded.

14. Regarding claims 22, 59 and 80, Cai teaches (col. 10, lines 1-10) determining the sequence identifier (R\_Seq\_N) associated with the next cell.

15. Regarding claim 38, Cai teaches (abstract) a data processor program product, comprising: a first data processor program processable by a first data processor; a first apparatus from which the first processor program is accessible by the first processor; and the program enabling the processor to: receiving a stream of sequentially aligned ATM cells via an originating end point logical communication link; associating a sequence identifier with each one of the cells (col. 2, lines 20-54; holding a first portion and a second portion of the cell in a first and second transmitter queue (fig. 11) associated with a first and second IM link (fig. 5); and sequentially forwarding the cells from each queue over the IM link wherein the first IM link has a data transmission rate disparate in at least one direction with respect to the transmission rate of the second IM (col. 6, line 52 – col. 7, line 5 and fig. 6).

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16. Regarding claim 63, Cai teaches (abstract) an inverse multiplexing communication system, comprising: a first apparatus including a first and second transmitter queue (fig. 11), capable of being coupled between an originating endpoint logical communication link and a plurality of IM links (fig. 5); and a first data program processable by a data processor of the first communication apparatus, enabling the first apparatus to: receiving a stream of sequentially aligned ATM cells via an originating end point logical communication link; associating a sequence identifier with each one of the cells (col. 2, lines 20-54; holding a first portion and a second portion of the cell in a first and second transmitter queue (fig. 11) associated with a first and second IM link (fig. 5); and sequentially forwarding the cells from each queue over the IM link wherein the first IM link has a data transmission rate disparate in at least one direction with respect to the transmission rate of the second IM (col. 6, line 52 – col. 7, line 5 and fig. 6).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 13 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cai in view of Counterman (U.S. 6222858 B1).

19. Regarding claims 13 and 50, Cai teaches all of the limitations of claim 1.

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20. Cai does not teach ADSL links.

21. Counterparty teaches (col. 3, lines 5-35) ADSL lines in an ATM network. It would have been obvious to one of ordinary skill in the art to adapt this to Cai's system to adapt ATM over telephone lines.

*Allowable Subject Matter*

22. Claims 25-37, 62 and 83 are allowed.

23. Claims 6, 7, 9-12, 14-16, 23, 24, 43, 44, 46-49, 51-53, 60, 61, 68, 69, 71-74, 81 and 82 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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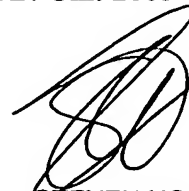
***Conclusion***

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Shand  
Examiner  
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A handwritten signature in black ink, appearing to be 'STEVEN NGUYEN', written over a horizontal line.

STEVEN NGUYEN  
PRIMARY EXAMINER